

## ABSTRACT OF THE DISCLOSURE

An operation state determining apparatus for determining an operation state of a fuel cell battery formed by stacking a plurality of unit cells each having a construction in which a wet-state solid electrolyte membrane is sandwiched between an anode that is supplied with a fuel gas and a cathode that is supplied with an oxidizing gas is characterized by comprising: a voltage measuring portion that measures a voltage of at least one of the unit cells or a voltage of a unit cell stack formed by stacking a plurality of unit cells; and an operation state determining portion which determines that the operation state is a first operation state that is one of a low fuel gas state and a dried-up state if the voltage measured by the voltage measuring portion is within a predetermined inappropriate voltage range, and is below a predetermined voltage that is pre-set at a low value that is substantially impossible during a low oxidizing gas state and during a flooded state, and which determines that the operation state is a second operation state that is one of the low oxidizing gas state and the flooded state if the voltage measured by the voltage measuring portion is within the inappropriate voltage range, and is above the predetermined voltage.